In an alternative embodiment, in order to assist the user in connecting graphics, the described vertices can optionally be treated as "gravity points". When either the stylus or a vertice of a moving object is positioned within a predefined range "ϵ" of a "gravity point", the CPU makes the assumption that the user is trying to position the stylus or vertice on the gravity point and the position of the stylus or moving vertice jumps to the gravity point. This makes it much easier for the user to quickly connect parts. The gravity point feature is preferably set up such that it may be activated and disabled by the user.

Although only a few embodiment of the present invention have been described in detail herein, it should be understood that the present invention may be embodied in many other specific forms without departing from the spirit or scope of the invention. For example, the computer system, on which the described graphics editor is implemented may be varied widely. Additionally, the nature of the highlighting, the appearance of the bounding box and the selection of the number of vertices that are used to define a line or other object may be widely varied in accordance with invention. Further, the algorithms described are exemplary in nature and may be widely varied within the scope of the invention. From the foregoing, it should be apparent that the present examples are to be considered as illustrative and not restrictive and the invention is not to be limited to the details given herein, but may be modified within the scope of the appended claims.

What is claimed is:

1. A method of editing objects displayed on a screen of a display assembly of a pen based computer system, the method comprising the steps of:

selecting a portion of an object to be edited, the selected portion of the object being displayed at an original location on the screen;

highlighting the selected portion of the object;

drawing a bounding box about the highlighted portion of the object; and

editing the object wherein during the editing step a user is permitted to duplicate the selected portion of the object by tapping a stylus on the screen at a location that is within the bounding box, wherein no other actions by the user are required to facilitate the duplication;

wherein when a duplication of the selection portion of the object is made, a duplicate of the selected portion of the object is displayed at a position that is offset from the position of the original selected portion of the object in a display updating step.

2. A method of editing objects as recited in claim **1** wherein the duplicate is displayed in highlighted form and the original selected portion of the object is displayed in unhighlighted form during the display updating step.

3. A method of editing objects as recited in claim **1** wherein the highlighting step displays the selected portion as associated double lines, the double lines being a pair of non-intersecting lines substantially parallel to the selected portion and each other that are emboldened relative to an unhighlighted image line that is displayed for an unselected portion wherein placement of the stylus over either one of the double lines or at a position therebetween is considered placing the stylus over the selected portion.

4. A method of editing objects displayed on the screen of a display assembly of a stylus based computer system, the method comprising the steps of:

a) selecting a portion of an object to be edited;

b) highlighting the selected portion of the object;

c) providing editing handles at designated positions relative to the selected portion of the object;

d) drawing a bounding box about the selected portion of the object;

e) editing the object by movements of the stylus across the screen wherein a user is permitted to,

resize the selected portion of the object during the editing step, wherein such resizing occurs when the user places the stylus on the perimeter of the bounding box and drags the stylus across the screen while the stylus is substantially in contact with the screen whereby the selected portion of the object is resized as a function of the movements of the stylus,

move the object by placing the stylus within the bounding box at a location that is not substantially directly over either the bounding box or any selected portion of the object and dragging the stylus across the screen while the stylus is substantially in contact with the screen whereby the entire object is moved as a function of the movements of the stylus,

duplicate the selected portion of the object by tapping the stylus on the screen at a location that is within the bounding box, wherein no other actions by the user are required to facilitate the duplication;

distort the object by placing the stylus on one of the editing handles and dragging the pointer across the screen while the stylus is substantially in contact with the screen whereby the object is distorted as a function of the movements of the stylus, and

move the selected portion of the object independent of any nonselected portions of the object by placing the stylus on the selected portion of the object at a location that is not substantially directly over an editing handle and dragging the stylus across the screen while the stylus is substantially in contact with the screen whereby the selected portion of the object is moved as a function of the movements of the stylus, and

f) updating the display to reflect any changes made during the editing step.

5. A method of editing objects as recited in claim **4** wherein the editing and updating the display steps are continually repeated until the stylus is lifted from the screen so as to provide the user with a visual depiction of the editing operation as it proceeds.

6. A method of editing objects as recited in claim **4** further comprising repeating the updating step during resizing, moving and distorting actions so as to provide the user with a visual depiction of the editing operation as it proceeds, and wherein:

the highlighting step displays the selected portion as associated double lines, the double lines being a pair of non-intersecting lines substantially parallel to the selected portion and each other that are emboldened relative to unhighlighted image lines that are displayed for the non-selected portions wherein placement of the stylus over either one of the double lines or at a position therebetween is considered placing the stylus over the selected portion.

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